CLAIMS

WHAT IS CLAIMED IS:

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1. A line interface for coupling to a first transport medium, the line interface comprising:

an integrated circuit comprising a programmable resistor; and

an external resistor coupled in parallel with the programmable resistor to provide a first effective impedance to substantially match an impedance of the first transport medium.

2. The line interface of claim 1, wherein the programmable resistor and the external resistor are coupled to provide a second effective impedance to substantially match an impedance of a second transport medium, wherein the impedance of the first transport medium is different from the impedance of the second transport medium.

3. The line interface of claim 2, wherein the impedance of the second transport medium substantially matches 75 ohms, 100 ohms or 110 ohms.

4. The line interface of claim 2, wherein the first transport medium is a T1 line and the second transport medium is a J1 line.

5. The line interface of claim 2, wherein the first transport medium is a T1 line and the second transport medium is a E1 line.

6. The line interface of claim 1, wherein the programmable resistor and external resistor are coupled to provide a second impedance to substantially match an impedance of a second transport medium responsive to a write to a register of the integrated circuit.

7. The line interface of claim 1, wherein the impedance of the first transport medium substantially matches 75 ohms, 100 ohms or 110 ohms.

8. The line interface of claim 1, wherein the programmable resistor can be disabled, and wherein the external resistor substantially matches 120 ohms.

9. The line interface of claim 1, wherein the integrated circuit comprises a second programmable resistor to couple to a secondary transport medium.

10. The line interface of claim 9, wherein the first transport medium has a first impedance and the secondary transport medium has a second impedance, and wherein the first impedance is different from the second impedance.

11. An integrated circuit comprising:

a receiver to receive a signal from a transport medium, the receiver having a ring input and a tip input; and

a programmable resistor to provide a resistance between the ring input and the tip input, the resistance being electronically programmable.

12. The integrated circuit of claim 11 further comprising:

a register coupled to the programmable resistor, wherein the resistance is electronically programmed by writing to the register.

13. The integrated circuit of claim 12, wherein the programmable resistor is comprised of a plurality of parallel resistors, and wherein a portion of the plurality of parallel resistors is enabled via a value written to the register.

14. The integrated circuit of claim 12, wherein the programmable resistor is comprised of a plurality of resistors and transmission gates coupled to the plurality of resistors, and wherein the transmission gates are controlled by writing to the register.

15. A method of tuning a resistance of an integrated circuit (IC) comprising:

determining the resistance of the IC corresponding to a first configuration of parallel resistors, wherein a portion of the parallel resistors are enabled;

modifying the resistance of the IC by creating a second configuration of parallel resistors, wherein a different portion of the parallel resistors are enabled.

16. The method of claim 15 wherein the modifying the resistance is performed by writing to a register on the IC.

17. The method of claim 15 further comprising:

permanently disabling a subsequent modification of the second configuration of parallel resistors.

18. The method of claim 17 further comprising:

controlling the entire second configuration of parallel resistors to be enabled and disabled.

19. The method of claim 17, wherein permanently disabling of a subsequent modification is achieved by blowing a fuse on the IC.

20. The method of claim 15, wherein modifying the resistance of the IC is performed by enabling a resistor of the parallel resistors to reduce the resistance of the IC by a predetermined percentage.

21. The method of claim 15, wherein modifying the resistance of the IC is performed by disabling a resistor of the parallel resistors to increase the resistance of the IC by a predetermined percentage.

22. In a line interface having a programmable resistor, a method of matching an impedance of a transport medium comprising:

writing to a register that controls the programmable resistor; and

changing the programmable resistor to provide an effective impedance substantially matching the impedance of the transport medium responsive to writing to the register.

23. The method of claim 22 wherein changing the programmable resistor is accomplished by disabling the programmable resistor.

24. The method of claim 22 further comprising:

coupling the line interface to the transport medium.

25. The method of claim 24, wherein the transport medium supports a T1, J1, or E1 transport protocol.

26. The method of claim 22 wherein the programmable resistor is changed to provide the effective impedance of 75 ohms, 100 ohms, 110 ohms, or 120 ohms.